IN THE CLAIMS

The following listing of claims replaces all previous versions.

1-18 (Canceled)

19. (Previously Presented) A method for increasing a strength of a composite structural material under load that includes a non-solid foam filled section and at least one solid section for structural mounting comprising the steps of:

forming a curved surface in an interface region interior to the composite structural material where the non-solid foam filled section adjoins the at least one solid section; and

bonding a structural foam in said non-solid structural foam filled section to said interface region wherein said curved surface reduces stress on said structural foam is reduced thereby increasing a loading capability of the composite structural material before delamination and cracking of said structural foam occurs.

20. (Previously Presented) The method for increasing a strength of a composite structural material under load that includes a non-solid foam filled section and at least one solid section for structural mounting as recited in claim 19 further including the steps of:

forming the composite structural material such that a first layer of material is common to said non-solid foam filled section and said at least one solid section to form a first major surface of the composite structural material;

forming the composite structural material such that a second layer of material is common to said non-solid foam filled section and the at least one solid section to form a second major surface of the composite structural material wherein said structural foam bonds to and is between said first and second layers of material in said non-solid foam filled section; and

forming one of said first or second layer of material having a curved surface in a region where said non-solid foam filled section transitions to the at least one solid section to further reduce stress on said structural foam.

21. (Previously Presented) The method for increasing a strength of a composite structural material under load that includes a non-solid foam filled section and at least one solid section for structural mounting as recited in claim 20 further including a step of forming the at least one solid section having at one or more layers of solid material between said first and second layers of material.

22. (New) A method for increasing strength of a composite structural material under load, the composite structural material including a non-solid foam filled section and at least one solid section for structural mounting, the method comprising the steps of:

forming a bullnose-shaped curved surface having two different radii in an interface region interior to the composite structural material where the non-solid foam filled section adjoins and protrudes into the at least one solid section; and

bonding a structural foam in said non-solid foam filled section to said interface region, wherein said curved surface reduces stress on said structural foam thereby increasing a loading capability of the composite structural material before delamination and cracking of said structural foam occurs.

23. (New) The method according to claim 22, wherein curvature of said radii in said interface is greater than twice a dimension of an average cell size of said structural foam.

24. (New) A method for increasing strength of a composite structural material under load, the composite structural material including a non-solid composite section having a ramp section defined by a straight outer wall and a tapered outer wall, and the composite structural material including a solid structural mounting section coupled to and extending away from the ramp section, the method comprising:

forming a bullnose-shaped curved surface in an interface region interior to the composite structural material where the non-solid composite section adjoins and protrudes into the solid structural mounting section, the bullnose-shaped curved surface comprising an upper portion near the tapered outer wall and a lower portion near the straight outer wall, the upper portion having a first radius and the lower portion having a second radius that is greater than the first radius; and

bonding a structural foam in said non-solid composite section to said interface region, wherein said curved surface reduces stress on said structural foam thereby increasing a loading capability of the composite structural material before delamination and cracking of said structural foam occurs.

25. (New) A method according to claim 24, wherein the structural foam at the upper portion of the bullnose-shaped curved surface has a convex cross section, and the structural foam at the lower portion of the bullnose-shaped curved surface has a convex cross section.

26. (New) A method according to claim 24, wherein the tapered outer wall is flat.

27. (New) A method according to claim 24, wherein the tapered outer wall is inwardly curved toward the straight outer wall.

28. (New) A method according to claim 24, wherein:

the upper portion of the bullnose-shaped curved surface contacts the tapered outer wall at a first location;

the lower portion of the bullnose-shaped curved surface contacts the straight outer wall at a second location;

the first location extends toward the solid structural mounting section, relative to the second location; and

the second location extends toward the non-solid composite section, relative to the first location.

29. (New) A method according to claim 24, wherein:

the upper portion of the bullnose-shaped curved surface corresponds to a relatively low stress location under load; and

the lower portion of the bullnose-shaped curved surface corresponds to a relatively high stress location under load.

30. (New) A method according to claim 24, wherein the rate of curvature of the lower portion of the bullnose-shaped curved surface is lower than the rate of curvature of the upper portion of the bullnose-shaped curved surface.

31. (New) A method according to claim 24, wherein the first radius is greater than twice the average cell size of the structural foam.